



MEETING SUMMARY

TRANS-LAKE WASHINGTON PROJECT EXECUTIVE COMMITTEE MUSEUM OF HISTORY AND INDUSTRY, SEATTLE, WA MARCH 26, 2001 — 1:00 P.M. – 3:00 P.M.

INTRODUCTION, WELCOME, AND AGENDA REVIEW

Amy Grotefendt, EnviroIssues, opened the meeting and reviewed the agenda. The purpose of the meeting was to receive information about the modal analysis and preliminary recommendations from the project team regarding the multi-modal alternatives. No agreements were scheduled regarding the multi-modal alternatives. Updates on the community design process and early actions were also distributed and discussed briefly.

Aubrey Davis, Washington Transportation Commission and committee chair, reiterated that the committee members should be considering whether they are satisfied with the data that are available, and asking questions that need to be asked to gain a comfort level with the data and the multi-modal recommendations.

PUBLIC COMMENT

No public comments were made.

RESULTS OF MODAL ASSESSMENT

Jeff Peacock, Parametrix, reviewed the process of the first and second level screening. He reiterated that the modal assessments enable the creation of multi-modal alternatives for second level screening with an understanding of each of the components' individual contributions. The objective of the modal assessments is to get an understanding of the basic performance measures, impacts and costs of individual alternatives. Comparisons will be made between the alternatives, and refinements can be made to the interchanges and termini. High capacity transit (HCT) alternatives are compared against each other for refinement of potential alignments. Jeff reminded the committee that the objective of including HCT analysis is to determine if Sound Transit's long-range vision for HCT in the I-90 corridor should be amended.

HIGH CAPACITY TRANSIT MODAL ANALYSIS

Jim Parsons, Puget Sound Transit Consultants, reviewed the high capacity transit analysis, again reiterating that the objective is to determine if the Sound Transit long-range vision needs to be amended. He outlined possible routes on both the west and east sides of the lake. Options for

bus rapid transit versus fixed guideway, and options for a route on SR 520 versus a mid-lake crossing versus the I-90 corridor are shown.

West side fixed guideway options include two loops between the University District, Ballard, and Fremont; and along the east side of Lake Union. Eastside networks included two variations between SR 520 and I-405: one route passing through Clyde Hill via tunnel to downtown Bellevue, and the other following the SR 520 and BNSF right-of-way. HCT in the I-90 corridor was modeled with service to downtown Bellevue, with extensions to Kirkland and Redmond.

Bus rapid transit could include a network of trunk and feeder routes or multiple longer routes. A final configuration would be determined by how best to handle large numbers of buses in crowded activity centers. The mid-lake crossing would have comparable routes and networks on both sides of the lake.

Total daily volume in transit ridership across the lake (using a lake 'screen line' that includes SR 520, I-90, and SR 522) showed no significant differences for any of the corridors, nor for the modes. There was a slight increase in ridership for the SR 520 corridor, possibly attributable to service to the University District. Variations in ridership projections are a function of the assumed networks; there is more sensitivity to the exact layout of a transit network in the I-90 corridor. Models showed up to a 40% increase in transit ridership over the no action alternative. Peak period transit ridership for the reverse commute shows better performance on SR 520 than I-90.

Lorie Parker, CH2M Hill, reviewed the potential environmental impacts of each of the options, excluding neighborhood impacts which will not be known until the design is more complete. She stated that she was giving only a broad overview of potential impacts, noting that already over 200 pages have been documented regarding environmental impacts. Along SR 520, in the Montlake area, the Endangered Species Act (ESA) is an issue for both fish migration and bald eagles. There are four parks in that area, including the Arboretum. There are significant 4(f) issues in the area. On the Eastside, Yarrow Bay wetlands, Kelsey Creek, Marymoor Park, the Sammamish River, and Bear Creek are all areas facing potential impacts.

The I-90 corridor on the west side would face fewer impacts, since the current bus-only facility would be used. On the Eastside, Mercer Slough, which represents a major park, wetland habitat, and historic buildings and Pickering Farms, would be impacted, in addition to those listed above.

A mid-lake crossing, in addition to those identified for the networks on the west and east sides, would also include construction impacts at the waterline, as well as impacts of portals and ventilation structures.

Jim Parsons presented the cost information for each of the options. Cost estimates are purely conceptual, and not based on design. Costs for the lake crossing, total costs, and mitigation enhancements were laid out. The costs for the lake crossing include only the structures and system components, but no vehicle costs. Total costs reflect the costs for the networks. The cost numbers are most useful for comparison within modes.

He noted that the costs for a new cross-lake facility are larger for BRT than for a fixed guideway system, because BRT would require a wider facility across the lake. Costs for the I-90 corridor include the cost of converting the reversible roadway, but do not include new structures. The mid-lake crossing costs assume either a floating submerged tunnel or a deep bored tunnel. Costs include all capital costs including fleets and maintenance facilities, but do not include mitigation. Cost savings for the I-90 corridor also reflect the use of an existing facility.

The total costs for HCT options reflect the anticipated costs of entire transit networks. The networks could potentially be constructed in stages.

Discussion noted the following points:

- Nona Ganz, City of Kirkland, asked about the possibility of having HCT on both the I-90 and SR 520 corridors at some point in the future. She noted that if the Sound Transit long-range vision remained unchanged and HCT was slated for the I-90 corridor, the possibility of HCT on SR 520 at some point about 20 years from now might be precluded, though there may be a demand. Jeff Peacock noted that this was a question raised by the Technical Committee also, and that it would need to be looked at. He noted that the prior Trans-Lake Study projected only moderate levels of ridership in 20/30 years if both corridors had HCT. Barbara Gilliland, Sound Transit, stated that through the work being done now, there would be a cost to including HCT in both corridors.
- Dan Becker, City of Medina, asked about whether it would be possible to create a reliable HCT system on SR 520 as a floating bridge. Jim Parsons stated that the bridge can be designed specifically for rail, but the exact layout and placement in relation to the highway lanes would not be known until that design work is done.

Jim Parsons reviewed the conclusions about the HCT modal analysis. He called attention to the following:

- A Clyde Hill tunnel option on the eastside does not significantly shorten travel times for most trips between points on the eastside and Seattle.
- The mid-lake crossing benefits do not offset the high risks and costs of tunneling, and the team believes it should be dropped from consideration.
- BRT alternatives have high costs for the ridership relative to the fixed guideway. A revised concept combining an HOV/transit facility will be introduced to reduce total costs.

HIGHWAY MODAL ANALYSIS

Jeff Peacock reviewed the highway alternatives and assumptions considered in the modal analysis:

- B-1 Minimum Footprint

- B-2 HOV lane in each direction
- B-3 HOV lane and GP lane in each direction
- B-5 Bus only lanes

Jeff gave an overview of the performance of each. The model for the minimum footprint (B-1) does not capture safety and reliability changes that would improve throughput over the no action alternative. The HOV lane (B-2) showed a 33% increase in person-trips, including an increase in mode sharing percentages. The GP and HOV (B-3) significantly increased the total person trips with a slightly lower percentage in mode shares. The bus only lanes (B-5) showed a decrease in total numbers of vehicles, with only a modest increase in the number of person trips served. The efficiency of the HOV lanes, therefore, would be much greater than the bus only lanes. Daily vehicle volumes and daily person trip volumes were outlined, for non-HOV, HOV, and commercial traffic.

Lorie Parker reviewed the environmental impacts of the highway modal alternatives. The areas impacted are generally the same as for the HCT options in the SR 520 corridor. A tunnel connection through the Montlake Cut to Pacific Street is being considered, and such a project would be of great concern to the resource agencies. In general, environmental impacts will increase with the width of the facility.

Jeff Peacock reviewed the costs, noting that figures shown do not include mitigation (except stormwater), demand management packages, or the cost of money over time. Costs were broken out into mainline and interchange costs, and costs for local street improvements. Total costs then included contingency plans. The minimum footprint option, which assumes the facility would be upgraded to design standard shoulders, and that replacement of fixed spans would be more efficient than seismic retrofits, would cost more than one billion dollars. The total costs include design contingencies.

The following points were noted in discussion:

- Rosemarie Ives, City of Redmond, stated that there should be a policy discussion about what would be acceptable service levels from the highway transportation system, and whether funding would be made available to meet the demand of the public. Aubrey Davis recalled for the committee that the Trans-Lake Study Committee realized that for a project to work in the SR 520 corridor, there would be unmet demand.
- A question was raised about how projected vehicle crossings for the HOV lanes increase when the HOV lane is supplemented by an additional GP lane. Jeff Peacock stated that the model increases the number of vehicles for all modes when the number of lanes expands, and so the projected number of vehicles on HOV lanes will also rise.
- A request was made for information about how SR 520 roadway projections influence traffic on I-90, I-405, and I-5. Jeff Peacock stated that this can be made available. Connie Marshall, City of Bellevue, noted that information about I-90 will show how the

service levels will perform, since trips that use I-90 currently would shift to SR 520 because of increased capacity on SR 520.

- Conclusions about the performance of adding a only a single GP lane can be drawn, but it is not as straight-forward as subtracting HOV lane performance from the HOV and GP lane performance. The number of vehicles on a GP lane only would likely increase beyond projections for an HOV lane. Since service would likely be more congested, the number of vehicles may be a little lower.
- 11,500 daily vehicle trips does not necessarily saturate the HOV lane. Jim Parsons stated that the trip distribution assignment is made before the mode split in the models: the trip chooses the path first, and then the mode split, with the choice of path based on the relative attractiveness of the corridor.
- Jeff Peacock clarified how the mode sharing would change for the non-HOV lanes given different possibilities for HOV lanes.
- Jeff Peacock noted that the 172,000 vehicles and 217,000 people anticipated at the mid-lake screen line is the first cut from the model. These numbers will change as the interchange and operational analyses are done.
- Connie Marshall noted that the possibility of not serving the transportation needs of the region has the potential to lose large employers in the region. Frustration from traffic delays and lost worker productivity could be reasons for employers to move elsewhere. Lorie Parker mentioned that this type of analysis will be done in the EIS, but that it was not set as a screening criterion for this phase.
- Full design standards are assumed for all footprints at this time.
- It was requested that costs of the No Action alternative be highlighted.

PROPOSED MULTI-MODAL PACKAGES

Jeff Peacock reviewed the proposed multi-modal packages recommended by the project team. He stated that the information was being shared with the committee for informational purposes only, and that recommendations would not be sought from the various committees until April. He highlighted the philosophies and ideas behind each of the packages.

The project team has proposed dropping consideration of the following:

1. Mid-Lake HCT crossing. The models have indicated the same levels of ridership as the other two corridors. Since the purpose of including the alternative was to see the benefits of having direct downtown Seattle to downtown Bellevue connections, it does not seem prudent to take on the risk associated with tunneling either in a deep bored or floating submerged tunnel for little added benefit.

2. Minimum footprint. The minimum footprint does not ultimately meet the purpose and need of the project. Other ideas are being proposed which expand upon the philosophy of the idea.
3. Bus only lanes. Much higher throughput is achieved by combining buses in the HOV lanes, at a much greater efficiency. A hybrid is proposed to expand upon this possibility.

The multi-modal alternatives proposed for further consideration are as follows:

1. No Action. It is suggested that under the No Action alternative, just the floating portion of the bridge be replaced, with no other changes made in the corridor. The risk of not taking action on the remaining fixed spans and the rest of the corridor can then be evaluated, and the EIS can then compare all other actions against a truly 'no action' alternative.
2. Safety and Preservation alternative. This alternative shows the cost of no action in terms of replacement of both the floating portion of the bridge and the fixed spans and Portage Bay viaducts for seismic considerations. Refuge for disabled vehicles would be provided, but not necessarily to full design standards. The concept adds non-motorized facilities to the corridor, and would include an aggressive TDM package. It assumes I-90 operates on the R8A option, with HCT in that corridor.
3. SR 520 HOV and I-90 HCT
4. SR 520 HOV and GP and I-90 HCT. The GP lane would terminate at West Lake Sammamish Parkway.
5. SR 520 HOV and SR 520 HCT. HOV lanes would terminate at I-5.
6. SR 520 HOV and GP and SR 520 HCT. This alternative represents the maximum build, with a fixed guideway system. Direct HOV connections would be made to I-5.
7. SR 520 HOV/BRT. A hybrid BRT is accomplished by separating the HOV/BRT lane with a four feet wide pylon separation to enable full speed next to congested GP traffic.
8. SR 520 HOV/BRT and GP. This alternative also explores a separated, dedicated busway from Eastlake to downtown, in the existing right-of-way.

Jim Parsons noted that the operational configuration of I-90 (4-2-4, 3-2-3, etc) is uncertain, and that an assumption needs to be made for modeling purposes. The choice for an HCT corridor will not change the HCT modal analysis. However, the choice of a corridor for HCT will affect the bus and roadway volumes in both of the corridors. Another permutation would be added if a different assumption is made for the I-90 roadway configuration.

Discussion noted the following points:

- The extended service life of a bridge replaced under the safety and preservation alternative would be about 70 years.

- The question of what would be needed to drop the HOV lane operational requirement to 2-plus persons was again raised. Jeff Peacock stated that this is an operational issue, and that the demand for 2-plus would be heavy enough to drive the speed of the HOV lane below 45 mph. The occupancy requirements are therefore raised to maintain the reliability of the HOV system.
- Conceptual design will be done on 25 interchange options over the next several weeks.
- Connie Marshall asked why Overlake would be the Eastside transit hub instead of downtown Bellevue. Bellevue is investing \$164 million in a T-ramp to downtown and a dedicated transit center. Two of the alternatives seem to ignore those assumptions. Jim Parsons clarified that the alternatives for HCT appeared to skip downtown Bellevue, since the Clyde Hill tunnel did not have significant performance gains. The wording on that alternative will be changed.
- Dan Becker asked whether the bridge will have two or three spans. Hans Saxer, Parsons Brinckerhoff, stated that the most desirable solution would be to have a single bridge, but there are constraints concerning the width and getting it into Lake Washington.
- Dan Becker also voiced concern about addressing HCT until issues about how wide the bridge would be are addressed, and whether the floating bridge could accommodate rail traffic. Jeff Peacock stated that the design issue questions would be detailed in the EIS.
- Philip Rourke, City of Clyde Hill, raised the question of whether a choice should be made for HCT. If the bridge will have a 70-year lifespan, it seems that HCT on both corridors may be the long range answer. Would the group of eight multi-modal alternatives leave the possibility of considering HCT on both corridors?

Jeff Peacock stated that if the committee decides that HCT should be on SR 520, then that possibility is accomplished. If the committee decides that HCT should be on I-90, then the question becomes one of whether the SR 520 corridor can be designed to accommodate HCT at some point in the future, using public dollars for a future investment that hasn't been analyzed in detail.

Dave Earling, Sound Transit Board Chair and committee vice-chair, stated that while building a transportation system with a life expectancy of 70 years, time to sort things out should be taken, though it frustrates the planners. It's an enormous question, and the region should be sure that the answer is correct.

- Bryan Cairns, City of Mercer Island, asked about whether the alternatives would reflect the different possibilities for I-90 lane configurations. Jeff Peacock stated that it would be a relatively modest amount of work.
- Amy Grotefendt called attention to the input from the Advisory and Technical Committee members that has been summarized in one of the handouts.

EARLY ACTIONS AND COMMUNITY DESIGN UPDATE

Amy Grotefendt briefly reviewed the input received at the I-90 corridor open houses. There were about 40 people at three open houses, and about 15 written comments received. The team is looking for ways to reach out to the communities in the I-90 corridor. Amy briefly reviewed the concerns expressed in each of the areas, stating that similar concerns have been expressed across the corridor. There is a degree of skepticism that the projects will actually be built. There were significant concerns about community impacts from a tunnel to the Eastlake/Fairview area. Noise concerns will need to be addressed throughout the corridor, and lids remain a constant theme.

Aubrey Davis suggested that committee members attend at least one of the open houses to get a sense of how the consultants are dealing with the various possibilities.

Jeff Peacock stated that the early actions update was included in the committee packets, and suggested that the committee members take a look at these, as significant progress was made on a number of these.

MEETING SCHEDULE

The next Advisory Committee meeting will be held April 25, 2001, at the Peter Kirk Room in Kirkland City Hall.

MEETING HANDOUTS

- Agenda
- Highway Alternatives Modal Evaluation Initial Findings, report, Mar 9, 2001
- High Capacity Transit Modal Evaluation Initial Findings, report, Mar 9, 2001
- Modal Assessment Results, presentation, March 2001
- Proposed Alternatives for Multi-Modal Evaluation, draft matrix, March 26, 2001
- Input from Technical and Advisory Committees regarding proposed Multi-Modal Alternatives, March 26, 2001
- Input from Community Design Workshops and Open Houses, presentation, March 2001
- Early Actions Progress Report, March 10, 2001
- Memo to Committees RE: SR 520 Light Rail Connections of the Central Link Corridor, March 13, 2001, from Barbara Gilliland, Sound Transit
- Meeting Schedule

ACTION ITEMS

- Look at long-term possibility of HCT on both I-90 and SR 520.
- Show performance on I-90, I-5, and I-405 in relation to SR 520 alternatives.
- What type of facility would be needed to support a 2+ HOV lane instead of 3+?
- Clarify use of planned downtown Bellevue facilities in description of HOV/BRT on SR 520 options, as well as for HCT.
- Show effect of different configurations on I-90 on HCT assumptions.

MEETING ATTENDEES

Executive Committee Members

Present	Name	Organization
X	Becker Daniel	City of Medina
X	Berry Jeanne	Town of Yarrow Point
X	Cairns Bryan	City of Mercer Island
	Conlin Richard	City of Seattle
X	Crawford Jack	Sound Transit Board
X	Davis Aubrey	Washington Transportation Commission
X	Earling Dave	Sound Transit Board
	Edwards Bob	Puget Sound Regional Council
	Fong Gene	Federal Highway Administration
X	Ganz Nona	City of Kirkland
	Gehrke Linda	Federal Transit Administration
X	Grigsby Daryl	City of Seattle
	Horn Jim	Washington State Senate
X	Ives Rosemarie	City of Redmond
	Jacobsen Ken	Washington State Senate
X	Marshall Connie	City of Bellevue
	Martin George	City of Clyde Hill
	McConkey Fred	Town of Hunts Point
	McIver Richard	City of Seattle
	McKenna Rob	King County Council
	Murray Ed	WA State House of Representatives
X	Noble Phil	City of Bellevue
	Okamoto John	WSDOT - NW Region
	Pflug Cheryl	WA State House of Representatives
	Sullivan Cynthia	King County Council
X	Taniguchi Harold	King County Department of Transportation
	Wills Heidi	City of Seattle

Executive Committee Alternates

Present	Name	Organization
X	Asher David	City of Kirkland
X	Bowman Jennifer	Federal Transit Administration
	Drais Dan	FTA
X	Carpenter Trish	Town of Hunts Point
	McKenzie Jack	Town of Hunts Point
	Creighton Mike	City of Bellevue
	Demitriades Paul	City of Medina
X	Dye Dave	WSDOT - NW Region
	Fimia Maggi	Puget Sound Regional Council / King County Council
	Hague Jane	King County Council
	Hughes Gary	Federal Highway Administration

	Jahncke	El	City of Mercer Island
	Conrad	Richard	City of Mercer Island
	Kargianis	George	Washington Transportation Commission
X	Paine	Thomas	City of Redmond
X	Rourke	Philip	City of Clyde Hill
	Rutledge	Steve	City of Yarrow Point
X	Switaj	Ed	City of Seattle
	White	Bob	Sound Transit

Other attendees

Johnathan Dubman, Montlake
Philip Grega, Seattle
Roland White, Kirkland
Kingsley Joneson, Montlake
Jean Amick, Laurelhurst
Linda Muller, WSDOT
Mitch Wasserman, Clyde Hill

Project Team

Les Rubstello, WSDOT
Rob Fellows, WSDOT
Jeff Peacock, Parametrix
Jim Parsons, Puget Sound Transit Consultants
Cathy Strombom, Parsons Brinckerhoff
Hans Saxer, Parsons Brinckerhoff
Lorie Parker, CH2M Hill
Eileen Wilson, CH2M Hill
Pat Serie, EnviroIssues
Paul Hezel, EnviroIssues

PJH